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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/602,412	06/23/2000	Melvin Richard Zimowski	ST9-99-080	9095

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EXAMINER
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NGUYEN, QUANG N

ART UNIT	PAPER NUMBER
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2141

DATE MAILED: 08/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action  
Before the Filing of an Appeal Brief**

Application No.

09/602,412

Applicant(s)

ZIMOWSKI, MELVIN RICHARD

Examiner

Quang N. Nguyen

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**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 17 July 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires \_\_\_\_\_ months from the mailing date of the final rejection.  
b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

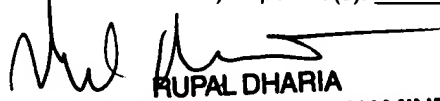
4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: None.  
Claim(s) objected to: None.  
Claim(s) rejected: 1-40.  
Claim(s) withdrawn from consideration: None.

**AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See attachment.  
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). \_\_\_\_\_.  
13. ☐ Other: \_\_\_\_\_.

  
RUPAL DHARIA  
SUPERVISORY PATENT EXAMINER

***Detailed Action***

1. This Office Action is in response to the Response Under 37 CFR 1.116 filed on 07/17/2006. Claims 1-40 remain pending.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. **Claim 1, 4-9, 11, 13, 16-21, 23, 25, 28-33, 35, 37-39 and 40 are rejected under 35 U.S.C. 102(e) as being anticipated by Burns et al. (US 6,298,373), hereinafter "Burns".**

4. As to claim 1, **Burns** teaches a method for managing data stored in a data storage device connected to a computer, comprising:

determining that a web page to be cached, wherein the web page references other objects (a policy manager 128 which defines and administers rules that determine

which documents or resources, i.e., web pages, are cached in the cache memory 124, for instance, a Web page, which references other objects such as images, audio or video tiles, from a frequently visited Web site) (Burns, col. 10, lines 48-55);

storing the referenced objects in one or more data stores (if the Web page references or includes continuous data files, such as audio or video files, these referenced files are stored in a continuous media server CMS 126) (Burns, col. 5, lines 8-20);

caching the web page in a cache (caching the content received from the content provider, i.e., caching the frequently requested Web page in the cache memory 124 based on the policy manager 128) (Burns, col. 10, lines 48-55); and

automatically managing the cached web page and the referenced objects to ensure the display of a complete web page (the target specifications embedded in the Web page to reference the continuous data tiles are modified/managed to reference the local copy of the continuous data files so that the continuous video/audio data stream can be rendered just-in-time by the subscriber, i.e., to ensure the display of a complete web page with all the referenced objects) (Burns, col. 9, line 42 – col. 10, line 10).

5. As to claim 4, **Burns** teaches the method of claim 1, further comprising:

receiving a request to generate a dynamic web page (receiving a request for the CNN Web page from the first subscriber of 6:40 AM); and

retrieving data and placing the data in a dynamically generated web page (the local service provider 110 serves the Web page, with hyperlinks to various data items,

*such as audio and/or video clips, from the cached memory 124) (Burns, col. 9, line 42 – col. 10, line 10).*

6. As to claims 5-6, **Burns** teaches the method of claim 4, wherein managing the cached web page and referenced objects comprises the steps of:

receiving a request from an administrator to delete the retrieved data (*or linked objects*) based on administrator-provided input (*time-to-live "TTL" tags are computed by the local service providers and assigned to the content to assist in determining when the content should be refreshed or disposed/deleted*) (**Burns, col. 10, line 59 – col. 11, line 19**); and

deleting the retrieved data (*linked objects*) based on the administrator-provided input (*deletion policies are a function of the content itself, i.e., the content will be deleted when its "TTL" tag assigned by the administrator of local service providers expires, how frequently the content is requested, etc.*) (**Burns, col. 10, line 59 – col. 11, line 19**).

7. As to claim 7, **Burns** teaches the method of claim 1, further comprising, processing a caching directive that specifies whether the web page should be cached (*a policy manager 128 defines and administers rules that determine which documents, i.e., web pages, are cached in the cache memory 124*) (**Burns, col. 10, lines 48-55**).

8. As to claims 8-9, **Burns** teaches the method of claim 1, further comprising, associating an expiration timestamp with the web page, wherein the expiration stamp

defines a time period in which the cached web page is valid (time-to-live "TTL" tags are computed and assigned to the content to assist in determining when the content should be refreshed or disposed, i.e., when the time-to-live "TTL" expires, the content is no longer valid and should be updated or deleted) (**Burns, col. 10, line 59 – col. 11, line 19**).

9. As to claim 11, **Burns** teaches the method of claim 8, wherein managing the cached web page and referenced objects comprising:

receiving a request from an administrator to delete all cached web pages according to some administrator-specified selection criteria (*the local service providers, i.e., the administrators, might compute the "TTL" tags for the content it caches in cache memory based on some specified selection criteria*) (**Burns, col. 10, line 65 – col. 11, line 14**); and

deleting all cached web pages and referenced objects that satisfy the administrator-specified selection criteria (*deletion policies are a function of the content itself, for example, when the "TTL" set by the administrator expires, how frequently the content is requested, etc., the content will be deleted*) (**Burns, col. 11, lines 15-19**).

10. As to claim 37, **Burns** teaches the method of claim 1, wherein at least one of the referenced objects is not stored in said cache (the audio and video clips referenced by the hyperlinks are stored in the content media server CMS 126) (**Burns, col. 9, lines 45-48**).

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11. Claims 13, 16-21, 23 and 38 are corresponding apparatus claims of method claims 1, 4-9, 11 and 37; therefore, they are rejected under the same rationale.

12. Claims 25, 28-33, 35 and 39 are corresponding article of manufacture claims of method claims 1, 4-9, 11 and 37; therefore, they are rejected under the same rationale.

13. As to claim 40, **Burns** teaches the method of claim 1, wherein the cached web page and the referenced objects are automatically managed ensuring the display of a complete web page by referencing a dependency table storing relation information for the cached web page and the referenced objects *(a conversion table can be constructed which converts requests from referencing the files at the "original" Web site to referencing the files in the "local" CMS 126, inherently, the conversion table must have included the "original" links to the target data content at the "original" Web site and the "modified" links to the target data content at the "local" CMS 126, wherein both "original" and "modified" links are associated/embedded with/within the corresponding cached web page, i.e., containing relation information for the cached web page and the referenced objects)* (**Burns, col. 9, lines 52-65**).

***Claim Rejections - 35 USC § 103***

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. **Claims 2-3, 10, 12, 14-15, 22, 24, 26-27, 34 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burns, in view of Shimomura et al. (US 6,526,580).**

16. As to claims 2-3, **Burns** teaches the method of claim 1, but does not explicitly teach when one or more of the referenced objects is deleted, deleting the web page from the cache and vice versa.

In an analogous art, **Shimomura** teaches a broadband data broadcast system that allows rich multimedia content including audio, video, text, web pages, etc., to be delivered to a plurality of subscribers, wherein a multimedia receiver/server system 700, as illustrated in Fig. 7, comprises one or more caching applications 745 selectively captures multimedia information and stores that multimedia content information 753 in a file system 750. The caching application 745 may also handle cache clean up as old and outdated information should be removed from the file system 750 to conserve resources. **Shimomura** teaches the caching application 745 informs the web page



constructing application 760 about multimedia information (*e.g., web pages, referenced objects*) being removed from the file system 750 such that the web page constructing application 760 can remove references to deleted information (*i.e., remove web pages that contain deleted referenced objects and vice versa*) (**Shimomura, col. 11, lines 3-42**).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the teachings of **Burns** and **Shimomura** to remove references to deleted information (*i.e., delete the web page from the cache when one or more of the referenced objects is deleted and vice versa*) since such methods were conventionally employed in the art to allow the system to organize and manage a cache object store as old and outdated information should be removed from the cache object store to conserve resources (**Shimomura, col. 11, lines 8-10**).

17. Claims 10 and 12 contain similar limitations as those of method claims 2-3; therefore, they are rejected under the same rationale.

18. Claims 14-15, 22 and 24 are corresponding apparatus claims of method claims 2-3, 10 and 12; therefore, they are rejected under the same rationale.

19. Claims 26-27, 34 and 36 are corresponding article of manufacture claims of method claims 2-3, 10 and 12; therefore, they are rejected under the same rationale.

### ***Response to Arguments***

20. In the Remarks, Applicant argued in substance that

(A) Prior Art fails to disclose or suggest “*automatically managing the cached web pages and the referenced objects to ensure the display of a complete web page*”, as claimed in independent claims 1, 13 and 25.

As to point (A), **Burns** teaches based on a policy manager 128 included in a local service provider 110, which defines and administers rules that determine which documents or resources are cached in the cache memory 124 (*i.e., determining web pages to be cached*). A web page, for example, the CNN web page is downloaded over the Internet and stored in the cache memory 124 (*i.e., caching the web page in a cache*), if the CNN web page contains links to any audio or video clips of recent news, these data files are also downloaded and stored in the Continuous Media Server CMS 126 (*i.e., storing the referenced objects in one or more data stores*). The links within the cached web page are modified to reference the audio and video files stored locally in the CMS 126, instead of the files maintained at the CNN web site. So, when requested by a subscriber, the CNN web page will be served from the cache memory 124 and the continuous video/audio data stream can be rendered immediately from the CMS 126 for just-in-time rendering on the subscriber's computer, hence, the complete web page can be served from the local service provider 110 (*i.e., automatically managing the cached*

web page and the referenced objects to ensure the display of a complete web page)

(Burns, col. 5, lines 8-22 and col. 9, line 42 – col. 10, line 10).

Hence, Prior Art (**Burns**) does disclose or suggest, “*automatically managing the cached web pages and the referenced objects to ensure the display of a complete web page*”, as claimed in independent claims 1, 13 and 25.

(B) Applicant argued, “*Burns discloses neither storing image files and other data files in one or more data stores nor managing image files and other data files in one or more data stores. There is no disclosure as to managing other referenced objects aside from continuous data files.*”

As to point (B), In response to applicant's argument that the references fail to show “*storing and managing image files and other data files in one or more data stores*”, it is noted that the features upon which applicant relies (i.e., “*storing and managing image files and other data files in one or more data stores*”) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In addition, as illustrated in Fig. 2, **Burns** teaches the ISP 56 has a cache server 72 and a continuous media server (CMS) 74, wherein the cache server 72 caches Internet resources (i.e., caching Web pages from frequently visited Web sites providing

rich multimedia presentations which blend text, images, sound, and video, etc.), such as those requested by subscriber computers 58, 60, that have been downloaded from the content provider 52 to allow localized serving of those resources (**Burns, col. 6, lines 56-65**). **Burns** also teaches the local service provider 110 includes a policy manager 128, which defines and administers rules that determine which documents or resources are cached in the cache memory 124. For instance, caching rules might call for caching resources that are routinely requested by many subscribers, but foregoing caching resources that are rarely or infrequently requested (**Burns, col. 10, lines 48-55**).

Hence, Examiner respectfully submits that one of ordinary skill in the art would have appreciated that depending on various specific-implementation, image files and other data files might be cached in the cache memory 124 or if they are large files and referenced by hyperlinks, they might be cached in the Continuous Media Server CMS 126 with the video and audio files, since the Continuous Media Server is configured as a disk array data storage system consisting of many large capacity storage disks with the capability of storing large files.

(C) Prior Arts do not teach or suggest “when the web page is deleted from the cache, deleting the referenced objects”, as claimed in claim 3.

As to point (C), **Shimomura** teaches a broadband data broadcast system that allows rich multimedia content including audio, video, text, web pages, etc., to be delivered to a plurality of subscribers, wherein a multimedia receiver/server system 700,

as illustrated in Fig. 7, comprises one or more caching applications 745 selectively captures multimedia information and stores that multimedia content information 753 in a file system 750 (*i.e., capturing and storing rich multimedia content including audio, video, text, web pages, etc.*) (**Shimomura, col. 10, lines 1-10**). The caching application 745 may also handle cache clean up as old and outdated information should be removed from the file system 750 to conserve resources (**Shimomura, col. 11, lines 8-10**). Shimomura teaches the caching application 745 informs the web page constructing application 760 about the cached multimedia information (*e.g., cached web pages, cached referenced objects*) being removed from the file system 750 such that the web page constructing application 760 can remove references to deleted information (*hence, if the deleted information is a deleted web page, then any file, hyperlink, and/or any other web page contained or referenced that deleted web page would be removed/deleted, i.e., remove web pages that contain deleted referenced objects and vice versa*) (**Shimomura, col. 11, lines 3-42**).

Hence, Prior Art (**Shimomura**) does teach or suggest “when the web page is deleted from the cache, deleting the referenced objects”, as claimed in claim 3.

21. Applicant's arguments as well as request for reconsideration filed on 07/17/2006 have been fully considered but they are not deemed to be persuasive.

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22. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quang N. Nguyen whose telephone number is (571) 272-3886.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's SPE, Rupal Dharia, can be reached at (571) 272-3880. The fax phone number for the organization is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Quang N. Nguyen  
Patent Examiner  
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